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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,112	08/21/2006	Akira Uematsu	8006-1032	7421
465 7590 03/04/2010 YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314			EXAMINER WOO, KUO-KONG	
			ART UNIT 2617	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary

Application No.

10/576,112

Applicant(s)

UEMATSU ET AL.

Examiner

KUO WOO

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. This action is response to the Amendment filed on November 23, 2009.
2. Claims 10, and 50-55 have been amended, claims 1-55 are currently pending.

Response to Amendment

3. Applicant's arguments, with respect to claims 1,4,7,10,17-31,34-35, 40,43,45, and 50-55, filed on 8/21/2006 have been fully considered and are persuasive.

35 U.S.C. 112 rejections have been withdrawn.

4. Applicant's arguments, with respect to claims 1-55, filed on 8/21/2009, with respect to the rejection(s) of claim(s) under U.S.C.102 (b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of new prior art reference.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

A claim drawn to such a computer readable medium that covers both statutory (non-transitory) and non-statutory (transitory) embodiments (under the broadest reasonable interpretation of the claim when read in light of the specification and in view

of one skilled in the art) embraces subject matter that is not eligible for patent protection and therefore is directed to non-statutory subject matter.

Claims 50-55 are rejected under 35 U.S.C. 101 because the amended claimed invention is directed to non-statutory subject matter. In specification ¶254, the program is stored and provided on a computer-readable storage media, **“such as” a magnetic disc and a semiconductor memory, read by a computer during computer startup or the like.** However, “such as” does not exclude transitory medium. The embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. 101 by adding the limitation “no-transitory” to the claim. Cf. *Animals-Patentability*, 1077 Off. Gaz.Pat. Office 24 (April 21, 1987).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-49 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ishii (US PGPUB 2003/0153310 A1) in views of Evensen et al. (US PGPUB 2003/0153332 A1).

Regarding claims 1-6 , 15 , 31-34 and 38, Ishii discloses "a mobile communication network to which one or more terminals and one or more terminal position determination devices are connected, and one or more servers that can communicate with said terminal, said terminal position determination device having a function for receiving a position request message from said terminal and providing to said terminal, information on the position of said terminal, when said terminal notifies the server selected from said one or more servers that can communicate with said terminal of the positional information of the terminal itself, said terminal obtaining via said position request message said information on the position of the terminal itself from said terminal position determination device, determining the positional information of the terminal itself and notifying said selected server of the positional information", (¶30 which recites mobile multi-network, GMLC (terminal position determination device) and client terminal and HLR/HSS and SGSN (server) and privacy setting are stored in GMLC as referring to FIG. 1, there is shown a location system of a mobile multi-network environment according to the present invention. The location service system is comprised of a plurality of GMLCs (gateway mobile location centers) 202 and 212 to which client terminals 201 and 211 are respectively connected to send their location requests. GMLC 202 is connected to SGSN/MSCs (serving GPRS support node/mobile service switching centers) 203 and 213. GMLC 212 is also connected to both SGSN/MCSs 203, 213. Further, both GMLCs are interconnected to each other to send a location request to the other GMLC when the request is for a UE terminal of the external network. RANs 204 and 214 are connected to SGSN/MSCs 203, 213,

respectively. UE terminals 205 and 215 are connected via a wireless link to the RANs 204, 214, respectively. For simplicity, only one RAN is shown connected to each SGSN/MSC as a representative of a number of RANs managed by the associated SGSN/MSC. Identification data of SGSN/MSC 203, which manages RAN 204 where UE terminal 205 is connected, is maintained in an HLR/HSS (home location register/home subscriber server) 206 and the identification data of SGSN/MSC 213, which manages RAN 214 where UE terminal 215 is connected, is maintained in an HLR/HSS 216. The privacy settings of UE terminal 205 are stored in GMLC 202 and the identification data of GMLC 202 is stored in HLR/HSS 206. The privacy settings of UE terminal 215 are stored in GMLC 212 and the identification data of GMLC 212 is stored in HLR/HSS 216. Each of the HLR/HSS 206 and 216 is connected to both GMLCs 202, 212),

“wherein said terminal position determination device has privacy settings for users who use each of the terminals, and a privacy check unit, which privacy check unit having a function for determining, based on said privacy setting, whether to permit the notification of the positional information from said terminal to said selected server, wherein said terminal position determination device, upon receiving said position request message from said terminal, determines by using said privacy check unit whether to permit the notification of the positional information from said terminal to said selected server, and if permitted, provides to said terminal said information on the position of said terminal” (¶14, which recites (GMLC) holding privacy setting and performing checking as client terminal for transmitting a location request specifying a

target mobile terminal, a positioning system accessible to the mobile terminals for producing location information in response to a location request, and a gateway for holding privacy settings of the mobile terminals, performing a first privacy check on a location request of the client terminal using the privacy settings of a target mobile terminal specified by the request, transmitting the request to the positioning system to obtain location information if the request conforms to the privacy settings, and performing a second privacy check on the location information using the privacy settings of the target mobile terminal) and (¶32, which recites if privacy check fail or user disapproval that In response to a location request either from a client terminal or other GMLC (step 301, FIG. 2A), the GMLC of each network (hereinafter requesting GMLC) proceeds to step 302 to check to see if the location request is from a client terminal or from other GMLC. If it is determined that the location request is from a client terminal, flow proceeds from step 302 to step 303 to verify the authentication of the requesting client terminal. If the verification fails, flow proceeds to step 327 (FIG. 2C) to send an error message to the requesting client terminal). However, Ishii does not explicitly disclose "notification of the positional information from terminal to selected server".

In an analogous art, Evensen discloses (¶44 and 45, which recites after GMLC verified privacy check then messages for individual positioning are then exchanged between the RAN 6 and the UE and a Location Report 43 containing the location information is then sent from the RAN 6 to the SGSN or MSC 3 (selected Server).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ishii teaching in privacy setting in combination of

Evensen provides enhanced user privacy when responding to a location request from a client requesting location information for a mobile terminal. (See Abstract).

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include: Combine prior art elements according to known method to yield predictable result.

Regarding claims 7-10, and 35-37 Ishii discloses "two or more mobile communication networks ,(¶130 which recites mobile multi-network, GMLC (terminal position determination device) and client terminal and HLR/HSS and SGSN (server) and privacy setting are stored in GMLC [as referring to FIG. 1) to which one or more terminals and one or more terminal position determination devices are connected, and one or more servers that can communicate with said terminal, said terminal position determination device having a function for receiving a position request message from said terminal and providing to said terminal, information on the position of said terminal, when said terminal notifies the server selected from said one or more servers that can communicate with said terminal of the positional information of the terminal itself, said terminal obtaining via said position request message said information on the position of the terminal itself from said terminal position determination device, determining said positional information of the terminal itself and notifying said selected server of said positional information, wherein a first of said terminal position determination device associated with a first of said mobile communication network has privacy settings for users who use each of the terminals associated with said first mobile communication network, and a privacy check unit, which privacy check unit having a function for

determining whether to permit, based on said privacy setting, the notification of the positional information from said terminal associated with said first mobile communication network to said selected server” Evensen discloses (§44 and 45, which recites after GMLC verified privacy check then messages for individual positioning are then exchanged between the RAN 6 and the UE and a Location Report 43 containing the location information is then sent from the RAN 6 to the SGSN or MSC 3 (selected Server),

“wherein a second of said terminal position determination device associated with a second of said mobile communication network, upon receiving said position request message from said terminal associated with the first mobile communication network, (§32, which recites the second network and other GMLC check with home GMLC (first network and GMLC) that in response to a location request either from a client terminal or other GMLC (step 301, FIG. 2A), the GMLC of each network (hereinafter requesting GMLC) proceeds to step 302 to check to see if the location request is from a client terminal or from other GMLC. If it is determined that the location request is from a client terminal, flow proceeds from step 302 to step 303 to verify the authentication of the requesting client terminal. If the verification fails, flow proceeds to step 327 (FIG. 2C) to send an error message to the requesting client terminal.) inquires of said first terminal position determination device about whether to permit the notification of the positional information from said terminal to said selected server, wherein said first terminal position determination device determines by using said privacy check unit whether to permit, based on said privacy setting, the notification of the positional information from

said terminal to said selected server, and notifies said second terminal position determination device of the result of the determination”,

“wherein said second terminal determination device provides to said terminal said information on the position of said terminal, if the notification of the positional information from said terminal to said selected server is permitted based on the result of (¶33, which recites if home GMLC is verified that If the client terminal is verified (step 304), flow proceeds to step 305 to determine whether a home GMLC that manages the privacy information of the target UE is already known. If the requesting GMLC is the privacy management node of the target UE terminal, the decision at step 305 is affirmative and flow proceeds to step 308.) said determination notified from said first terminal position determination device”. (¶34, which recites that if the decision at step 305 is negative, flow proceeds to step 306 to send an enquiry message to the HLR/HSS of the network which the target UE belongs to, in order to obtain information as to the identity of a home GMLC that maintains the privacy information of the target UE. If the identity of the home GMLC is obtained from the HLR/HSS, the decision at step 307 is affirmative and flow proceeds to step 308 to determine whether the received GMLC identity indicates that the requesting GMLC is the home GMLC of the target UE.)

Regarding claims 11-14, Ishii discloses “wherein said first privacy check device inquires, by using said privacy check unit, of the user of said terminal about whether to permit the notification of the positional information to said server, and notifies said second privacy check device of the result, notified from said terminal, of the determination by said user” (¶32, which recited the other GMLC privacy check result

determined by user that In response to a location request either from a client terminal or other GMLC (step 301, FIG. 2A), the GMLC of each network (hereinafter requesting GMLC) proceeds to step 302 to check to see if the location request is from a client terminal or from other GMLC. If it is determined that the location request is from a client terminal, flow proceeds from step 302 to step 303 to verify the authentication of the requesting client terminal. If the verification fails, flow proceeds to step 327 (FIG. 2C) to send an error message to the **requesting client terminal**. (User)) .

Regarding claims 16 and 39, Ishii discloses "wherein said information on the position provided to said terminal from said terminal position determination device is supplementary information (¶16, which recites the additional information is provided that each gateway (GMLC) is arranged to transmit an **event-triggered location request** to the positioning system to **obtain location information of the target mobile terminal** if a specified event occurs with respect to the target mobile terminal, perform the second privacy check on the location information if the privacy settings of the target mobile terminal is not altered before the location information is obtained from the positioning system if the privacy settings of the target mobile terminal is altered before the location information is obtained from the positioning system) required for said terminal to determine the positional information of the terminal itself".

Evensen discloses (¶28, the GMLC 5 then forwards the LCS Request at 16 to the SGSN or MSC 3. The **forwarded LCS Request** carries the **Service Type (Service type and Requestor ID are supplementary information of UE location)** when one

has been received from the LCS Client 1. FIGS. 3A and 3B) required for said terminal to determine the positional information of the terminal itself”.

Regarding claim 17, Evensen discloses “a positional information notification method comprising the steps: (1) a terminal for notifying a server that can communicate with the terminal of the positional information of the terminal itself transmits a position request message (¶16, The system includes a mobile location node that receives the location request from the client, requests routing information from the HLR/HSS (server), and forwards the location request to the service node) to a terminal position determination device (¶05, The main network component for providing LCS services is the GMLC (Gateway Mobile Location Center), to which all location requests are transmitted, and which, in return, provides the requested location from the mobile network, wherein GMLC is terminal position determination device,

2) Terminal position determination device determines whether to permit the notification of the positional information (¶17, the main network component for providing LCS services is the GMLC (Gateway Mobile Location Center), to which all location requests are transmitted, and which, in return, provides the requested location from the mobile network) from said terminal to said server based on privacy setting information for a user who uses said terminal,

(3) if the notification of the positional information from said terminal to said server has been determined to be permitted, position measurement (¶17, the method may also include the steps of mapping the service identity received in the location request to a service type utilizing a mapping function in the mobile location node) is performed

between said terminal position determination device and said terminal, wherein mapping function is same as position measuring function of terminal location.

(4) Terminal position determination device (¶26, the GMLC may utilize mapping function 13 to map the received service identity to a corresponding service type. If the codeword functionality is supported, the GMLC may reject the LCS Request whenever the LCS Client type is "value added" and the codeword was not received) provides to said terminal the positional information of said terminal obtained by said position measurement,

(5) Terminal notifies said server of said provided positional information of the terminal itself. (¶24, It is understood that both the SGSN and the MSC inform the HLR of their current LCS capabilities during a previous Update Location procedure.)

Regarding claims 18-29 have limitations similar to those treated in the above claim 17 rejection(s), and are met by the references as discussed above.

Regarding claim 30 has limitations similar to those treated in the above claim 7 rejection(s), and are met by the references as discussed above.

Regarding claims 40 and 48-49, Ishii discloses "a holding unit for holding privacy settings for users who use each of the terminals, (¶14, which recites position determination device (gateway) which holding privacy setting that a gateway for holding privacy settings of the mobile terminals, performing a first privacy check on a location request of the client terminal using the privacy settings of a target mobile terminal specified by the request, transmitting the request to the positioning system to obtain location information if the request conforms to the privacy settings, and performing a

second privacy check on the location information using the privacy settings of the target mobile terminal) and a privacy check unit for determining whether to permit, based on said privacy setting, the notification of the positional information from said terminal to said server”,

“wherein, when said terminal position determination device receives the position request message from said terminal, and inquires of said privacy check device about whether to permit the notification of the positional information from said terminal to said selected server, said privacy check device determines by using said privacy check unit whether to permit, based on said privacy setting, (¶30, which recites privacy setting device to determine notification that The privacy settings of UE terminal 215 are stored in GMLC 212 and the identification data of GMLC 212 is stored in HLR/HSS 216. Each of the HLR/HSS 206 and 216 is connected to both GMLCs 202, 212. as show in flowchart Fig 2A, 2B and 2C) the notification of the positional information from said terminal to said selected server, and notifies said terminal position determination device of the result of the determination”.

Regarding claim 41, Ishii discloses “wherein said privacy check device inquires of the user of said terminal about whether to permit the notification of the positional information to said selected server, and notifies said terminal position determination device of the result, notified from said terminal, of the determination by said user “ (¶11, which recites the determination by user that for securing location-service privacy protection not only for privacy parameters known at the time a location request is made,

but those privacy parameters which can be determined only at the time after the location information of the target mobile terminal is obtained.).

Regarding claim 42, Ishii discloses "wherein a condition for said inquiry of the user of said terminal is that the notification of the positional information from said terminal to said selected server is not permitted based on the privacy setting for the user who uses said terminal" (§39, which recites if not permitted that the decision at step 308 is negative, and flow proceeds to step 325 (FIG. 2C) to send a location request to the home GMLC and waits for location information from the home GMLC at step 326).

Regarding claims 43-47, Ishii discloses "wherein, when said terminal position determination device connected to the mobile communication network to which the privacy check device itself is connected receives said position request message from said terminal, and inquires of the privacy check device about whether to permit the notification of the positional information from said terminal to said selected server, if said terminal is the one associated with the mobile communication network to which the privacy check device itself is connected, said privacy check device determines by using said privacy check unit whether to permit, based on said privacy setting, the notification of the positional information from said terminal to said selected server, and notifies said terminal position determination device of the result of the determination, on the other hand, if said terminal is the one not associated with the mobile communication network to which the privacy check device itself is connected, said privacy check device inquires of other privacy check devices connected to other mobile communication networks

(¶12, which recites work with other network for privacy protection that securing location-service privacy protection for location requests from clients of an external network requesting the location of UE terminals of a home network by allocating functions and responsibilities to gateways of the networks) and (¶18, which recites that privacy setting in multi-network environment that FIG. 1 is a block diagram of a location system of the present invention for implementing location services with enhanced support for user privacy in a multi-network environment)with which said terminal is associated about whether to permit the notification of the positional information from said terminal to said selected server, and notifies said terminal position determination device of the result of the inquiry", (¶35, which recites user make determination of privacy setting that If the location request conforms to the privacy settings of the target UE, the home GMLC proceeds from step 312 to step 313 to send an enquiry message to the HLR/HSS system for requesting the identity of SGSN/MSC that manages the target RAN),

"wherein said privacy check device, when inquired by the other privacy check devices connected to the other mobile communication networks than the mobile communication network to which the privacy check device itself is connected, about whether to permit the notification of the positional information from said terminal residing the mobile communication network (¶21, which recites the workflow of privacy check setting between the networks that FIG. 4 is a sequence diagram for illustrating a series of events that occur across the location system when a home network client is requesting the location information of a UE terminal from an external network;)to which

the privacy check device itself is connected to said selected server, determines by using said privacy check unit whether to permit, based on said privacy setting, the notification of the positional information from said terminal to said selected server, and notifies the other privacy check devices of the result of the determination".

8. Claims 50-55 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ishii in views of Evensen et al. and in further view of Ichimura (US PG PUB 2003/0084119 A1)

Regarding claims 50 -51 and 53, Ishii and Evensen disclose invention as claims 1, 31 and 40 for a mobile network both Ishii and Evensen do not explicitly disclose a computer readable medium with computer program execute the all related embodiments.

In an analogous art, Ichimura discloses" A program causes (¶13, an object of the present invention is to provide a position information processing terminal and a position information supply system, and a position information processing method which intend to protect privacy of a user who is provided with position related information, and an operation **control program therefor**) in a positional information notification system comprising a mobile communication network to which one or more terminals and one or more terminal position determination devices are connected, and one or more servers that can communicate with said terminal, said terminal position determination device having a function for receiving a position request message from said terminal and providing to said terminal, information on the position of said terminal, when said

terminal notifies the server selected from said one or more servers that can communicate with said terminal of the positional information of said terminal, said terminal obtaining via said position request message said information on the position of the terminal itself from said terminal position determination device, determining the positional information of the terminal itself, and notifying said selected server of said positional information, a computer constituting (¶29, a **program for making a computer to execute a position information processing** method in a position information processing terminal for transmitting position information indicative of a position of a user to a server through a communication network and receiving position related information which is related to the position information from the server, comprising the function of) said terminal position determination device to function as a holding unit for holding the privacy setting for a user who uses said terminal, a privacy check unit for determining whether to permit, based on said privacy setting, the notification of the positional information from said terminal to said selected server, and a providing unit for, upon receiving said position request message from said terminal, determining by using said privacy check unit whether to permit the notification of the positional information from said terminal to said selected server, and, if permitted, providing to said terminal said information on the position of said terminal". Evensen discloses (¶06, The Provide Subscribe Location message is utilized by the GMLC to request the subscriber's location, from the Serving GPRS Support Node (SGSN) or Mobile Switching Center (MSC)) by using said privacy check unit (¶06, The SGSN or MSC maps the received LCS client ID parameter to the **subscriber's recorded privacy**

parameters (e.g., list of allowed LCS clients) to screen out any unwelcome location requests), of the user of said terminal about whether to permit the notification of the positional information to said selected server, and provides to said terminal said information on the position of said terminal (¶16, providing enhanced user privacy when responding to a location request from a client requesting location information for a mobile terminal only when said user permits the notification of the positional information to said selected server”(¶16, The mobile network includes a service node serving the mobile terminal and a home location register/home subscriber server (HLR/HSS) associated with the mobile terminal, wherein mobile unit will send location information to server (HSS) only if user permits.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ishii and Evensen teaching in privacy setting in location notification of terminal device and in combination of Ichimura provides computer program to execute the process through a communication network to supply position related information which is related to the position information in question from the server) see (¶29).

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include: Known work in one field of endeavor may prompt variation of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art; The TSM test.

Regarding claims 52, 54 and 55 have two or more mobile networks have limitations similar to those treated for claim 7, 35, 43, 45 and 50 rejection(s), and are met by the references as discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/576,112

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Art Unit: 2617

KUO WOO/

Examiner, Art Unit 2617

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617